[4310-55]

Title 50—Wildlife and Fisheries

CHAPTER I—U.S. FISH AND WILDLIFE SERVICE,
DEPARTMENT OF THE INTERIOR

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

Final Threatened Status and Critical Habitat for the Leopard Darler

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service issues this rulemaking which would determine the leopard darter (Percina pantherina) to be a Threatened species and which would determine Critical Habitat for that species. The leopard darter occurs in southeast Oklahoma and in western Arkansas.

DATE: This final rulemaking becomes effective on February 27, 1978.

FOR FURTHER INFORMATION CONTACT:

Mr. Keith M. Schreiner, Associate Director—Federal Assistance, Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C. 20240, 202-343-4646.

SUPPLEMENTARY INFORMATION:

BACKGROUND

The Fish and Wildlife Service published a Notice in the March 18, 1975, FEDERAL REGISTER (Vol. 40, No. 53, pp. 12297-12298) to the effect that a status review of 29 fishes was being conducted. The leopard darter was one of those species. As a result of this Notice, responses were received from the Governors of Arkansas and Oklahoma, the only States in which this species is known to occur. One comment was received from a biologist. These comments and supportive documents have been reviewed and a summary published in the FEDERAL REGIS-TER. The comments were published July 6, 1976 (FR Vol. 41, No. 130, pp. 27735-27738), as part of the proposal to determine the leopard darter to be Threatened and portions of the Little River system to be its Critical Habitat. Comments on the proposed rulemaking are summarized below. The information received as a result of the Notice of Review and the proposed rulemaking has been considered and is incorporated into the administrative record of this rulemaking. The information presently available indicates the leopard darter is a Threatened species as provided for by the Act.

SUMMARY OF COMMENTS AND RECOMMENDATIONS

Section 4(b)(1)(C) of the Act requires that a summary of all comments and recommendations received be published in the FEDERAL REGISTER prior to altering the List of Endangered and Threatened Wildlife and Plants. Comments received in response to the Notice of Review of the leopard darter (March 18, 1975, FR Vol. 40, No. 53, pp. 12297-12298) were summarized in the proposed rulemaking to determine the Critical Habitat and Threatened status for the darter (July 6, 1976, FR Vol. 41, No. 130, pp. 27735-27738). A total of 25 comments were received as a result of the above proposal.

Nineteen of the 25 comments received supported the proposal. These responses were from the State of Oklahoma, U.S. Forest Service, conservation organizations, professional biologists and interested individuals. A summary of these comments are presented below.

(1) The comments received from the Governor of Oklahoma indicated that he was in general agreement with the proposed Critical Habitat and Threatened Status for the leopard darter. While he agreed that Threatened Status seemed appropriate to the existing conditions, the situation is rapidly changing in the area inhabited by the darter and a further review of its classification may be needed in the near future. His primary concern was over the rapid loss of habitat for the darter due to a variety of factors. These factors were discussed in his response as follows: "While loss of habitat through large reservoir construction poses one of the most immediate threats to the survival of the leopard darter, there are a number of other factors at work in McCurtain County which may ultimately have more impact than the several dams proposed for the Little River watershed. McCurtain County currently ranks twelfth in growth among Oklahoma's 77 counties. Much of this has been the result of a major increase in activity by the timber industry, but there has also been much growth due to other economic development. McCurtain County will be significantly affected over the next few years by such factors as sewage effluents; solid waste; urban sprawl; new industries and their effluents; sediment from construction; overgrazed pastures; logging roads and clearcuts (many large clearcuts are already present on the banks of streams within the leopard darter's range-including Glover Creek); chemical runoff from industries as well as agricultural and forestry operations; and gravel mining. There is also a significant increase in the number of people participating in various types of outdoor recreation in this part of the state. The combined impact of all of these factors acting at once cannot be ignored." We agree that the rapid increase in the development of this area does contribute to the threats of the leopard darter and its habitat.

The Governor agreed that the streams proposed for Critical Habitat were critical to the leopard darter. He did suggest that the Service give consideration to several creeks that are tributaries of the streams which were proposed as Critical Habitat. The Governor also pointed out an error in the description of Critical Habitat segment of the East Fork of Glover Creek. The upstream end of the Critical Habitat lies four miles NNE of the town of Behtel, Okla., not NNW as indicated in the proposed rulemaking in the FEDERAL REGISTER. This correction has been made in the final rulemaking.

(2) The U.S. Forest Service's comments indicated that they had no objection to the proposal for the leopard darter. They did express concern that failure to identify key tributaries within the Critical Habitat area might be detrimental to the conservation of the species. They also provided locality data for one record of the leopard darter in the Ouachita National Forest in Arkansas.

(3) Five conservation organizations responded to the proposal. The Ozark Society agreed with the proposed Threatened status and the proposed Critical Habitat. The remaining four organizations—Monitor, Inc., Oklahoma Chapter of the Sierra Club, Environmental Defense Fund, and the Oklahoma Wildlife Federation—agreed with the Critical Habitat delineation, however, all four suggested an Endangered status rather than the Threatened status as proposed.

While the situation is serious, we do not believe the data indicate that the leopard darter is likely to become extinct in the foreseeable future. As was indicated by the Governor of Oklahoma, however, the area inhabited by the leopard darter is undergoing rapid alteration, and the Service is planning to monitor closely the habitat and populations of the species in the future.

The six professional biologists who responded to the proposal supported Threatened status for the leopard darter. They also supported the Critical Habitat delineation with one exception. It was recommended by Dr.

Clark Hubbs, University of Texas Zoology Department, that the extreme lower part of Glover Creek, below or downstream from Oklahoma Highway 7, be deleted from the Critical Habitat area. Dr. Hubbs has established, through field work and observations, that leopard darters occurring in this section of the Glover Creek are probably waifs from the upstream population. We have, therefore, not included this area in the final determination.

Six individuals responded to our proposal expressing their support, but they did not include any biological data.

Of the 25 comments received, 6 expressed concern over the proposed listing and delmeation of critical habitat. These responses were from the Southwestern Division of the Army Corps of Engineers, Red River Valley Association, Little River Conservation District, Idabel Chamber of Commerce and Agriculture, Broken Bow Chamber of Commerce, and one private individual.

The Army Corps of Engineers recommend that the rulemaking be suspended pending extensive studies by the U.S. Fish and Wildlife Service and that an environmental statement in compliance with NEPA be prepared.

The Corps of Engineers recommended that the proposal be suspended for the following reasons:

(a) The information published in the FEDERAL REGISTER of July 6, 1976, does not contain enough data to support the proposed determination. To base this decision on the comments of one biologist is questionable. This is substantiated by the fact that at each time our Tulsa District personnel have sampled waters in the Little River Basin, the known range of the leopard darter has expanded.

(b) The statement that: "Recent evi dence (1974 and 1975) available to us however, indicates that at least the population of the leopard darter oc curring in Glover Creek, Okla., is rela tively stable and secure * * *" appar ently stems from Tulsa District's ex tensive environmental studies of th Glover Creek basin in conjunction with the proposed Lukfata Lake pro ject. To our knowledge only one othe recent extensive survey (Ethridge, ur published masters thesis, "A Survey c the Fishes of the Cossatot River, Northeastern Louisiana State Unive: sity, Monroe, La.) has been complete in the Little River stream system. I other stream areas within the basi were sampled as intensively and tho: oughly as Glover Creek, evidence c secure and stable leopard darter popu lations in those areas would probabl be found. The enclosed unpublishe data (enclosure 1), recently collecte by the Corps in the Mountain For Upper Little River, and Cossate River, lend credence to that.

(c) On page 27735 of the publication in the Federal Register the proposal states, "Historically the Leopard Darter, Percina pantherina, was found throughout most of the upland large stream habitat of the Little River Drainage of Arkansas and Oklahoma." That statement is not supported by actual collections (Eley et al. 1975). Factual data would limit the known range of Percina pantherina to the Upper Little River, Mountain Fork, Cossatot River, and Glover Creek. Potential habitat occurs throughout the tributaries of the Little River: however, the history of the leopard darter is meager.

(d) The proposal also states: "From its once widespread range in the Little River drainage of Oklahoma and Arkansas, the alteration of its habitat through impoundment and pollution has greatly reduced its distribution and numbers." The statement is erroneous and gives an incorrect impression of the known range and abundance of the leopard darter. The entire range of the leopard darter has never been fully studied. Therefore, it may or may not have been "* * * once widespread * * *." To our knowledge, data have not been published (Eley et al. 1975) that provided population estimates for this fish. Impoundments, existing and under construction, in the Little River Basin could result in only a nine percent reduction in the total potential habitat of P. pantherina (Eley et al. 1975). Data collection records (Eley et al. 1975) indicate the P. pantherina is more abundant and has a greater range than was previously believed. The recent collections also support that statement.

(e) The words "invariably" and "virtually," referring to alteration of the Cossatot River by Gillham Dam and the authorized Lukfata Lake on Glover Creek, are subjective and are not supported with evidence presented in the proposed rulemaking. The copy of the draft environmental assessment that was secured from your office in response to our request to review the environmental assessment, which was stated in the proposed rules to be on file, does not contain supportive evidence.

(f) On page 27736 under "Critical Habitat Determination" the proposal reads: "Based on information received from experts on this species in Arkansas and Louisiana plus data presented in a recent publication by Eley et al., entitled "Current Status of the leopard darter, Percina pantherina (Southwestern Naturalist, Oct., 1975, Vol. 20, No. 3, pages 343-354), the following areas are proposed as Critical Habitat for the leopard darter, Percina pantherina." The experts should be named and the data on which they based their information should be listed. In our opinion, the reference to

Eley et al. has been misrepresented in your proposal. This document has been taken out of context and gives the reader a false impression of the findings in that paper. Dr. Eley states on page 353 of the paper, "Recent field studies using improved collection techniques indicate that P. pantherina is more abundant and has a greater range than was previously believed. Despite all of the potentially damaging results of man's activities, the present status of the leopard darter can best be described as rare or uncommon but certainly not immediately threatened with extinction."

(g) Recently, during the three-day study of the Cossatot River by Corps personnel, six specimens of Percina pantherina were discovered. Five of these were taken above Gillham Reservoir in Howard County, Ark., near the crossing of State Highway 4. The other specimen was taken from the Cossatot River 2 miles below Gillham Dam which is of special significance. Another specimen was collected in the fall of 1975 near Lockesburg, Ark., which is near the mouth of the Cossatot River. It will be interesting to follow up at these locations since the water releases at Gillham were designed to prevent disruption of the natural biology downstream. Followup studies would determine any possible effect of the lake's presence.

(h) Based on current data, the range and population of the leopard darter is greater than previously known. The assumption that "* * Gillham Dam will, in all probability, result in elimination of the species in that system * * *" is incorrect based on collection data which show leopard darter populations above Broken Bow, Pine Creek, and Gillham Lakes. A population exists also below Gillham Dam which will probably not be seriously disrupted since water releases from the dam are designed to maintain the biology of the stream. Likewise, the authorized Lukfata Lake would not threaten the existence of the leopard darter, but would occupy only a small portion of the habitat. Based on what is believed to be the most extensive study in existence on the occurrence of the leopard darter, the Tulsa District of the Corps of Engineers has found no evidence that either the existing dams or the proposed Lukfata Dam threaten the existence of the species.

The director has considered the above comments and the attachment submitted by the Southwestern Division of the Army Corps of Engineers. The Director has also considered other information obtained by the Fish and Wildlife Service subsequent to the proposed rulemaking. The response to the Army Corps of Engineers' comments presented below is based on information presently available.

(a) The information published in the FEDERAL REGISTER proposal represents

a summary of information available on the status of the leopard darter. While only one professional biologist responded to the notice of review, the decision to propose this species as threatened was based on information from several sources. While Corps of Engineers biologists have found additional localities for the species, the localities have with two exceptions been within the known range of the species.

(b) The comments in the proposed rulemaking referring to the status of the Glover Creek population were based in part on the Tulsa District Army Corps of Engineers environmental studies. Other biologists working in the area have indicated that the Glover Creek leopard darter population was the strongest known. Other streams with appropriate habitat (Rolling Fork and Saline River) within the Little River drainage have been well sampled over the years; however, to date the leopard darter has never been taken in these streams.

(c) The introductory statement referring to the historical range of the leopard darter is correct and is supported by Army Corps of Engineers data. The factual data indicates it occurs in four of the six upland large streams tributary to the Little River. Data presently available indicates that potential habitat does not occur throughout all tributaries of the Little River. Many of the tributaries to the Little River are low gradient streams without suitable substrate to support populations of the leopard darter.

(d) The statement in the proposed rulemaking indicating that the distribution and numbers of the leopard darter have been reduced is correct. Impoundments in the Little River system, which destroyed known localities for this species, obviously reduced its habitat and numbers. The Army Corps of Engineers' comment that impoundments, existing and under construction in the Little River basin would effect only 12 percent of the potential habitat is misleading. We feel that many areas listed as potential habitat by Eley et al. 1975 should not be considered potential habitat since numerous samples taken in these areas have failed to demonstrate the species' presence. In some cases, streams listed as potential habitat bear little or no resemblance to those streams known to be inhabited by the leopard darter.

(e) Use of the words "invariably" and "virtually," referring to impacts of impoundment projects within the range of leopard darters, are appropriate. Use of these words is based, in part, on information presented by Eley et al., 1975, page 350, which indicates that: "In the past, impoundments constructed to provide flood control and to develop water resources have been responsible for most habitat

losses." This statement was made in reference to the leopard darter's habitat.

(f) In the process of status and critical habitat determinations, we generally do not name the individuals who contribute information relative to a particular species in the FEDERAL REG-ISTER publication. However, names of individuals and the type of information they contributed is available on request from the U.S. Fish and Wild-life Service/Office of Endangered Species, Washington, D.C. 20240. We do not feel that the utilization of distributional data in Dr. Eley's 1975 publication on the status of the leopard darter in our determination of critical habitat misrepresented the findings of that study.

(g) The three localities where the leopard darter was recently collected in the Cossatot River, two localities below the reservoir and one locality above the reservoir, should be monitored to evaluate long-term effects of the Gillham Reservoir. The leopard darter populations isolated in short segments of a stream above a reservoir are in a very precarious position. Evidence for this statement is found in a recent Arkansas Game and Fish Commission report of a fish kill on Mountain Fork River above Broken Bow Reservoir which killed fish along several miles of streams. Once a population above a reservoir is extirpated by pollution or other causes, there is no chance for repopulation from downstream areas because of the barrier formed by the dam and reservoir. Other threats to the isolated populations above reservoirs, which was mentioned in Dr. Eley's 1975 paper (page 351), are genetic drift and the change in the species composition and relative abundance of fishes in the streams above the reservoir.

(h) Extirpation of the leopard darter from areas above Gillham Reservoir was addressed in the above response. The conclusion reached concerning the status of the leopard darter population below Gillham dam is based on knowledge of past cases of darter populations below dams. Dr. Eley's 1975 paper discussed the fact that the multiple level outlets provide a capability for selective withdrawal which could lessen downstream impacts. However, he also points out that other operating priorities may prevent operation to maintain optimum downstream temperatures. He also discusses the possible changes in composition of fish populations below the dam which may adversely affect the leopard darter. We conclude that the area below the dams are probably not suitable habitat.

Comments from four organizations, the Red River Valley Association, Little River Conservation District, Idabel Chamber of Commerce and Agriculture and Broken Bow Chamber of

Commerce, all expressed concern over the proposal and objected to any further action on the proposal. None of the comments contained any biological data relative to the leopard darter which would support their position.

One citizen from the area responded objecting to the proposal.

Conclusion

After a thorough review and consideration of all the information available, the Director has determined that the leopard darter, Percina pantherina, is threatened due to one or more of the factors described in section 4(a) of the Act. This review amplifies and substantiates the description of those factors included in the proposed rulemaking (Federal Register Vol. 41, No. 130, July 6, 1976). Those factors were described as follows:

1. The present or threatened destruction, modification, or curtailment of its habitat or range. Historically, the leopard darter, Percina pantherina, was found throughout most of the upland large stream habitats of the Little River drainage of Arkansas and Oklahoma. The habitat is typically clear, swift shoal areas in moderate to large streams. In these streams it is most frequently found in gravel areas with some sand intermixed. It also occurs along the borders of stream channels.

In the past, several of man's activities have resulted in the destruction or modification of habitat of the leopard darter. The single most important factor which has resulted in most habitat destruction has been the impoundments constructed in the Little River drainage. Other factors responsible for habitat alteration to a lesser extent include siltation from agricultural operations, commercial gravel operations, industrial and municipal effluents, and road construction. Both impoundment and pollution presently represent serious threats to the leopard darter.

From its once widespread range in the Little River drainage of Oklahoma and Arkansas, the alteration of its habitat through impoundment and pollution has greatly reduced its distribution and numbers. The present known distribution is Little River above Pine Creek Reservoir, Glover Creek, and Mountain Fork above Broken Bow Reservoir. Additionally, in a recent survey of the Cossatot River fishes, the leopard darter was found at two localities. These localities are below the recently completed Gillham Dam on the Cossatot River and should not be considered as supporting viable populations because upstream impoundments invariably result in the loss of populations occurring down-

The data presently available indicate that the leopard darter population in

Glover Creek is a relatively strong, viable population and thus the species is being proposed as threatened rather than endangered. Glover Creek in its present state has good water quality and offers good habitat for the leopard darter and numerous other stream-dwelling organisms. The proposed Lukfata Reservoir impoundment and subsequent alterations of Glover Creek, however, would drastically change the situation and virtually eliminate the leopard darter in this creek.

2. Overutilization for commercial, sporting, scientific, or educational purposes. Not applicable.

3. Disease or predation. Not applicable.

4. The inadequacy of existing regulatory mechanisms. Not applicable.

5. Other natural or manmade factors affecting its continued survival. Not applicable.

CRITICAL HABITAT

Section 7 of the Act, entitled "Interagency Cooperation" states:

The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal departments and agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the conservation of endangered species and threatened species listed pursuant to section 4 of this Act and by taking such action necessary to insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected States, to be critical.

An interpretation of the term critical habitat was published by the Fish and Wildlife Service and the National Marine Fisheries Service in the Federal Register of April 22, 1975 (40 FR 17764-17765). After a review of the available information for this species, the areas delineated below were found to qualify as critical habitat. Specifically, these areas were found to have environmental elements necessary for successful reproduction and growth.

The areas delineated do not necessarily include the entire critical habitat of this fish and modifications to critical habitat descriptions may be proposed in the future. In accordance with section 7 of the Act, all Federal departments and agencies would be required to insure that actions authorized, funded, or carried out by them do not result in the destruction or adverse modification of the critical habitat of the leopard darter.

All Federal departments and agencies shall, in accordance with section 7 of the Act, consult with the Secretary of the Interior with respect to any action which is considered likely to

affect critical habitat. Consultation pursuant to section 7 should be carried out using the procedures contained in the "Guidelines to Assist the Federal Agencies in Complying with section 7 of the Endangered Species Act of 1973" which have been made available to the Federal agencies by the Service.

EFFECTS OF THE RULEMAKING

In addition to the effects discussed above, the effects of these determinations and this rulemaking include, but are not necessarily limited to, those discussed below.

Endangered species regulations already published in Title 50 of the Code of Federal Regulations set forth a series of general prohibitions and exceptions which apply to all endangered species. These regulations are found at 50 CFR 17.21 and are summarized below.

With respect to the leopard darter in the United States, all prohibitions of section 9(a)(1) of the Act, as implemented by 50 CFR 17.21, would apply. These prohibitions, in part, would make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale this species in interstate

or foreign commerce. It also would be illegal to possess, sell, deliver, carry, transport, or ship any such wildlife which was illegally taken. Certain exceptions would apply to agents of the Service and State conservation agencies.

Regulations published in the FEDER-AL REGISTER of September 26, 1975 (40 FR 44412), codified at 50 CFR 17.22 and 17.23, provided for the issuance of permits to carry out otherwise prohibited activities involving endangered or threatened species under certain circumstances. Such permits involving endangered species are available for scientific purposes or to enhance the propagation or survival of the species. In some instances, permits may be issued during a specified period of time to relieve undue economic hardship which would be suffered if such relief were not available.

NATIONAL ENVIRONMENTAL POLICY ACT

An environmental assessment has been prepared in conjunction with this action. It is on file in the Service's Office of Endangered Species, 1612 K Street NW., Washington, D.C. 20240, and may be examined during regular business hours or can be obtained by mail. The action taken in determining the leopard darter to be a threatened

species and portions of selected streams of the Little River drainage in Arkansas and Oklahoma is not a major Federal action which would significantly affect the quality of the human environment within the meaning of section 102(2)(C) of the National Environmental Policy Act of 1969, thus it does not require an environmental impact statement.

The primary author of this rulemaking is Dr. James D. Williams, Office of Endangered Species, 202-343-7814.

AUTHORITY

These amendments are prepared under sections 4 and 7 of the Endangered Species Act of 1973 (16 U.S.C. 1533, 1536).

REGULATIONS PROMULGATION

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, is amended as set forth below:

1. Section 17.11 is amended by adding, in alphabetical order, under Fishes, the following to the list of animals:

§ 17.11 Endangered and threatened wildlife.

SPECIES AND RANGE

Common name	Scientific name	Population	Known distribution	Portion of range where threatened or endangered	Status	When listed	Special rules
Fishes: Darter, leopard	Percina pantherina	NA	U.S.A. (Arkansas, Oklahoma).	Entire T	r	31	17.44(d)

2. Section 17.44 is amended by adding a new § (d) as follows:

§ 17.44 Special rules—fishes.

- (d) Leopard darter (Percina pantherina).
- (1) All provisions of § 17.31 apply to this species, except that it may be taken in accordance with applicable State law.

(2) Any violation of State law will also be a violation of the Act.

3. Also, the Service amends § 17.95(e) Fishes by adding critical habitat of the leopard darter after that of the slackwater darter as follows:

§ 17.95 Critical habitat-fish and wildlife.

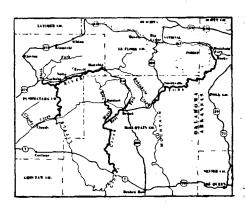
(e) Fishes.

LEOPARD DARTER (Percina pantherina)

Oklahoma. McCurtain and Pushmataha Counties. Little River, main

channel in Pushmataha County from mouth of Cloudy Creek (T. 3 S.; R. 20 E.; Section 3) upstream to the Pushmataha-Le Flore County line. Black Fork Creek in Pushmataha County from its junction with Little River (T. 1 S.; R. 20 E.; Section 22) upstream to Oklahoma Highway 144 crossing (T. 1 S.; R. 19 E.; Section 12). Glover Creek, main channel in Pushmataha County from Oklahoma Highway 7 crossing (T. 5 S.; R. 23 E.; Section 28) upstream to the junction of the East Fork and West Fork of Glover Creek. East Fork and West Fork of Glover Creek. East Fork of Glover Creek, main channel in Pushmataha County from its junction with the West Fork Glover Creek (T. 3 S.; R. 23 E.; Section 7) upstream to 4 air miles north-northeast of the community of Bethel (T. 2 S.; R. 24 E.; Section 5). West Fork Glover Creek. main channel in Pushmataha County from its junction with the East Fork Glover Creek upstream to the community of Battiest (T. 2 S.; R. 23 E.; Section 7). Mountain Fork Creek, main channel in McCurtain County, from mouth of Boktukola Creek (T. 2 S.; R. 25 E.; Section 9), 6 air miles south-southwest of Smithville, upstream to the Oklahoma-Arkansas State line.

Arkansas. Polk County. Mountain
Fork Creek, main channel from the
Arkansas-Oklahoma State line upstream to the community of Mountain
Fork (T. 1 S.; R. 32 W.; Section 29).



RULES AND REGULATIONS

CRITICAL HABITAT FOR THE LEOPARD DARTER

Note.—The Department of the Interior has determined that this document does not contain a major action requiring preparation of an economic impact statement under Executive Order 11949 and OMB Circular A-107.

Dated: January 18, 1978.

KEITH M. SCHREINER, Acting Director, Fish and Wildlife Service.

[FR Doc. 78-2182 Filed 1-26-78; 8:45 am]